OUR WATERSHED

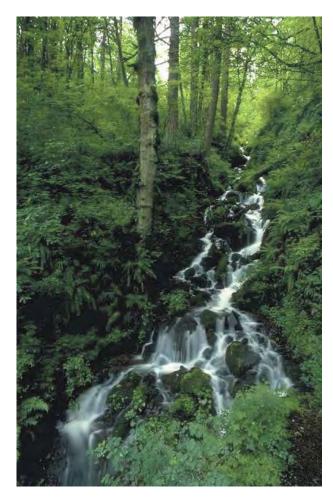
Sourth Jetty, Fort Stevens

A watershed or basin is an area that contributes surface water to a river, lake, ocean or groundwater supply, and is defined by drainage divides or ridges that determine which way the surface water will flow. Each watershed is a unique area where soils, vegetation, runoff, water quality and flow, and aquatic ecosystems are connected. These form important units of water quality and supply, and are studied carefully for ecological monitoring and planning.

Some small watersheds in Oregon flow directly into the Pacific Ocean or to sumps that evaporate or replenish groundwater supplies. The Willamette Basin moves water from south to north, emptying into the Columbia River at Portland. From there, the Columbia carries fresh water to the Pacific Ocean just west of Fort Stevens.



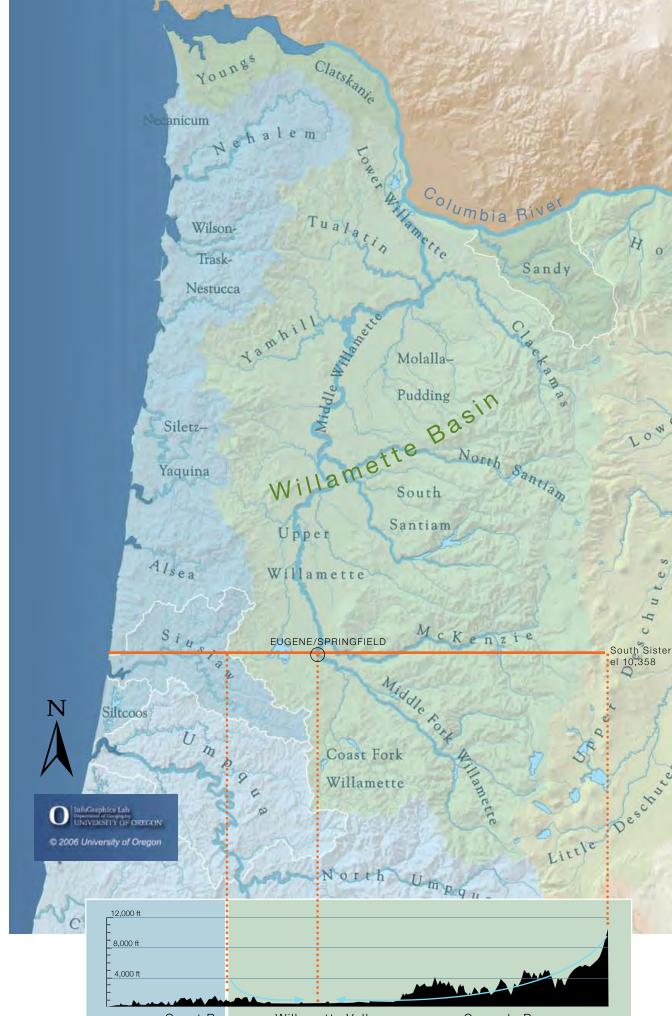




From mountain top to river bed, snow melt, springs and stormwater flow from higher elevations to the Willamette Valley. Since Eugene/Springfield is near the headwaters of our watershed system, any pollution such as soaps, oils, pesticides or bacteria we add to the river can travel to our neighbors in Albany, Salem and Portland, or may flow as far as the Pacific Ocean.



Thirteen major tributaries connect to the 187-mile-long Willamette River, draining 12,000 square miles of land (the green area at right). The Willamette Basin is a sub-region of the Columbia River Region—one of the major watersheds of the western United States that collects waters from as far north as Canada and as far east as Wyoming. By following these connections, scientists learn how water use and pollutants from cities, agricultural operations and industrial plants affect water quality and habitats for many miles downstream.



Coast Range Willamette Valley Cascade Range

The shape of a basin. This topographic cross section of Lane County follows the solid orange

line in the map above from the Pacific Ocean to the South Sister in the Cascades.



Riparian wetlands, also known as swamps, marshes and bogs, are an important part of our watershed system. These areas adjacent to rivers and streams perform a critical role in absorbing flood waters and filtering some pollutants from stormwater. A complex and often unique food web develops in wetlands that relies on their distinctive soils, nutrients and seasonal conditions. Migratory birds often seek a particular wetland area for feeding or raising young.

Many of Eugene's wetlands (above) may flood in the winter and become dry and meadow-like in the summer. They support an abundance of wildflowers, grasses, and wildlife year-round, including the camas plant (right)—

a bulb that was an important staple food for the Kalapuya peoples of Western Oregon.





Sources: Atlas of Oregon, William G. Loy ed. 2001; and the American Heritage River website at www.epa.gov/rivers/
Map courtesy of the University of Oregon Infographics Lab and Oregon Trout at www.ortrout.org; topographic chart reprinted with permission from the Atlas of Oregon.

Learn more about local watershed councils at www.oregonwatersheds.org

For additional stormwater education materials, visit www.eugene-or.gov and click on the Stormwater

Education quick link, or call 682-8482.